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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,618	11/07/2001	Neil S. Casa	5300-17	4190

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EXAMINER

TRAN, THUY VAN

ART UNIT	PAPER NUMBER
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3652

DATE MAILED: 02/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/007,618

Applicant(s)

CASA, NEIL S.

Examiner

Thuy v. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) 10, 11, 16, 20, 21 and 35-53 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-34 is/are allowed.
- 6) ☒ Claim(s) 1-7, 12-15 and 17-19 is/are rejected.
- 7) ☒ Claim(s) 8 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Species A (paddle with opening) in Paper No. 7 is acknowledged.

Claims 10, 11, 16, 26 and 35-57 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 8.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claim 1, the recitation "during at least one of the pressurization and depressurization", found in lines 9-10, renders the claim indefinite because it is not unclear whether "one of the pressurization and depressurization" is the same as "alternating depressurization and repressurization" as recited in line 5 or not. Further, it is unclear what applicant meant by "having a wafer-receiving surface having with openings therein". Does applicant mean "having a wafer-receiving surface with openings therein"?

Claim 12 recites the limitation "said loadlock chamber" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 12-15, 17-19 (as best understood) are rejected under 35 U.S.C. 102(b) as being anticipated by Adams et al. 6,123,502.

Adams et al. '502 disclose a semiconductor wafer holding system comprising a transfer chamber 12, interposed between ambient atmosphere and an inspection chamber which is at vacuum pressure and subjected to alternating depressurization and repressurization, at least one paddle 52 arranged in the transfer chamber, having a wafer-receiving surface with openings 64 therein, drawing means 60 for drawing the wafer to the wafer-receiving surface of the paddle to thereby inhibit motion of the wafer, wherein the drawing means comprise a vacuum source 60, conduit means 58 for providing flow communication between the vacuum source and the opening, and proving a pressure at the openings lower than the pressure prevailing in the transfer chamber, a valve 62 for opening and closing the flow communication between the vacuum source and the openings.

Re claims 17-19, the apparatus of Adams et al is capable of performing the claimed functions.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Each of the cited references separately discloses a semiconductor wafer holding system for holding wafers having at least one paddle with openings therein and drawing means for drawing the wafer to the wafer-receiving surface of the paddle.

Allowable Subject Matter

Claims 22-34 are allowed.

Claims 8 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: the prior art of record fail to disclose or suggest to combine a method for transferring semiconductor wafers between ambient atmosphere and an inspection chamber, maintained at vacuum pressure, through a transfer chamber, comprising the steps of transferring a wafer from the ambient atmosphere through a first gate valve onto a paddle in the transfer chamber while the transfer chamber is isolated from the inspection chamber by a closed second gate valve, providing the paddle with a wafer-receiving surface having openings therein, the wafer being placed on the paddle and over the openings, coupling the openings in flow communication with a vacuum source or pump, controlling the flow communication between the vacuum source or pump and the openings during at least one of the depressurization and repressurization of the transfer chamber to cause the wafer to be drawn to the wafer receiving surface by suction and thereby inhibit motion of

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the wafer during the at least one of the depressurization and repressurization of the transfer chamber, in combination with other limitations as recited in respective independent claims 22 and 27.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy v. Tran whose telephone number is 703-308-2558. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached on 703-308-3248. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TVT (TVT)


EILEEN D. LILLIS
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